shortly acuminate apex. Flowers are pink, 1.0-1.2 cm and are borne on axillary racemes which are up to 15 cm long. The pods which are an important identification character, are single seeded, glabrous, reticulately veined and distinctly winged. It usually requires sufficient amount of freshwater to survive and has its coastal distribution from East Africa, Madagascar, and throughout tropical and subtropical Asia to tropical Australia. It is recorded in several coastal communities and is a frequent constituent of the back mangrove community (Tomlinson 1986). In India, it is reported to occur in the intertidal forests of all the coastal states except Gujarat (Thothathiri 1982; Banerjee *et al.* 1989; Rajendran and Sanjeevi 2004).

The mangrove forests in Gujarat have generally been described as being shrubby in nature and having low diversity compared to the other states of India (Anon 1987; Singh 2006). The mangrove forests of Kachchh and Jamnagar have received much attention of researchers, whereas mangrove forests in southern Gujarat have received comparatively little attention and hence the diversity of these mangroves remain uninvestigated. A recent report (February 2007) of several individuals of *Excoecaria agallocha* from the Varoli estuary (Dr. Sachin Chavan pers. comm.) is also an addition to the mangrove flora of Gujarat. A thorough investigation into the mangrove diversity of southern Gujarat could lead to further additions.

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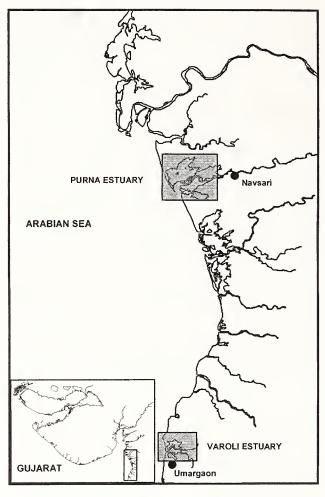


Fig. 1: Location of Purna and Varoli Estuaries

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# 21. PRELIMINARY OBSERVATIONS ON YELLOW MORNING GLORY *IPOMOEA HEDERIFOLIA* LINN. (CONVOLVULACEAE)

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Occurrence of yellow coloured flowers is recorded for the first time in Indian species of *Ipomoea hederifolia* Linn. of Family Convolvulaceae. Plants were growing naturally as a part of natural vegetation in Sinhachalum hillocks of

#### MISCELLANEOUS NOTES

Visakhapatnam district of Andhra Pradesh. On critical identification and detailed study, the specimen turned out to be *Ipomoea hederifolia* Linn. When compared with red/orange coloured flowers, there were slight variations in the specimens in most of the characters except the inflorescence type, colour of the flower and size of the fruit. The details of the morphological feature are as follows: an annual twiner, 3-6 m in height; stems glabrous or sparsely pubescent; leaves ovate to suborbicular, 2.5-8.0 x 1.5-8.5 cm, acute to acuminate apex, cordate at base, entire or 3-lobed, glabrous; flowered cymes; pedicles 10-12 mm long; sepals oblong to elliptic, 3-6 mm long, obtuse to truncate; outer sepals with 1.5-2.0 mm long, subterminal, fleshy arista, glabrous; corolla yellow, hypocrateriform, 3.4-5.0 cm long; capsules subglobose, 7-9 mm long; seeds pyriform, dark brown, glabrous.

On consultation to Dr. M.J. Parmar, Dy. Director of BSI, Arid zone Circle Jodhpur, it has been noted that

no yellow flowered Morning Glory from the Indian subcontinent is available. For further clarification, we also consulted Dr. Steven Jensen, Jordell Laboratory, Royal Botanical Garden Kew; he communicated that there was only one specimen of *I. hederifolia*, which had been collected from Asia (i.e. in Jiangsu-China). Perusal of literature (Cooke 1901-1909, Bentham and Hooker 1862-83; Shah 1978) has revealed that there is no record of yellow flowered specimens in *Ipomoea hederifolia*. This is therefore, the first record from India. Acc. No. VMR/523, 547.

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## 22. ORNITHOGALUM ERYTHRAEUM (WEBB & BERTHEL.) MANNING AND GOLDBLATT (HYACINTHACEAE) – A NEW RECORD FOR MAHARASHTRA

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## Introduction

Morphological, phytochemical, microstructural and molecular data on members of Hyacinthaceae has resulted in the recognition of four subfamilies, the new world Oziroeoideae and the old world Hyacinthoideae, Ornithogaloidae and Urginoideae (Speta 1998a,b; Pfosser and Septa 1999; Manning et al. 2004). Subfamily Ornithogaloideae, characterized by flattened or angular seeds with tightly adhering testa, is considered to include the single genus Ornithogalum L., [Sp. pl.: 306 (1753). Type: Ornithogalum arabicum L.], which is expanded to include the genera Albuca L., Dipcadi Medik., Galtonia Decne., Neopatersonia Schonland, and Pseudogaltonia (Kuntze) Engl. According to Manning et al. (2004), the generic segregates of distinctive floral forms are morphological syndromes developed in association with diverse pollination strategies. It opens the way to accept that they reflect adaptive modes that were exploited by groups of related species rather

than representing generic boundaries. Thus, the species previously placed in *Dipcadi* are now treated under *Oruithogalum* L. Manning *et al.* (2004).

All the 9 species and two varieties of *Dipcadi* in India are now treated under the genus *Ornithogalum* by Manning *et al.* (2004). The Indian species include *Ornithogalum coucanense* (Dalzell) J.C. Manning and Goldblatt, *O. erythraeum* (Webb & Berthel.) Manning and Goldblatt, *O. maharashtrense* (Deb. & S. Dasgupta) J.C.Manning and Goldblatt, *O. reidii* (Deb. & S. Dasgupta) J.C. Manning and Goldblatt, *O. reidii* (Deb. & S. Dasgupta) J.C. Manning and Goldblatt, *O. saxorum* (Blatt.) J.C. Manning and Goldblatt, *O. turbinatum* J.C.Manning and Goldblatt, *O. turbinatum* var. *madrasicum* (E. Barnes & C.E.C. Fisch) J.C.Manning and Goldblatt and *O. ursulae* (Blatt.) J.C. Manning and Goldblatt and *O. ursulae* var. *longiracemosum* (Deb. & S. Dasgupta)